

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU2004/001020

## A. CLASSIFICATION OF SUBJECT MATTER

Int. Cl. <sup>7</sup>: H04R 17/00; G01S 15/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
 WPAT, USPTO, ESP@CENET - keywords (sonar, sonic, curve, shape, contour, antenna, parabolic, elliptic and the like)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<b>US 5373483 A (BURKE)</b> 13 December 1994 See abstract, column 5 lines 11-45	1-13
A	<b>US 5345428 A (ARNOLD et al.)</b> 6 September 1994 See entire document	
A	<b>US 6400649 B2 (SKINNER et al.)</b> 4 June 2002 See abstract & Figs. 1-4	

Further documents are listed in the continuation of Box C

See patent family annex

* Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent but published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

16 September 2004

Date of mailing of the international search report

22 SEP 2004

Name and mailing address of the ISA/AU

AUSTRALIAN PATENT OFFICE  
 PO BOX 200, WODEN ACT 2606, AUSTRALIA  
 E-mail address: pct@ipaustralia.gov.au  
 Facsimile No. (02) 6285 3929

Authorized officer

  
 Robert Finzi  
 Telephone No : (02) 6283 2213

**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

International application No.

PCT/AU2004/001020

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report		Patent Family Member				
US	5373483	US	5237542	US	5327397	
US	5345428	AU	50650/90	AU	71637/87	AU 71639/87
		EP	0297100	EP	0297101	GB 2209645
		GB	2211693	US	5016228	US 5029148
		WO	1987/005772	WO	1987/005773	
US	6400649	CA	2298394	EP	1039444	US 6278658
		US	2001022757			

Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001.

END OF ANNEX